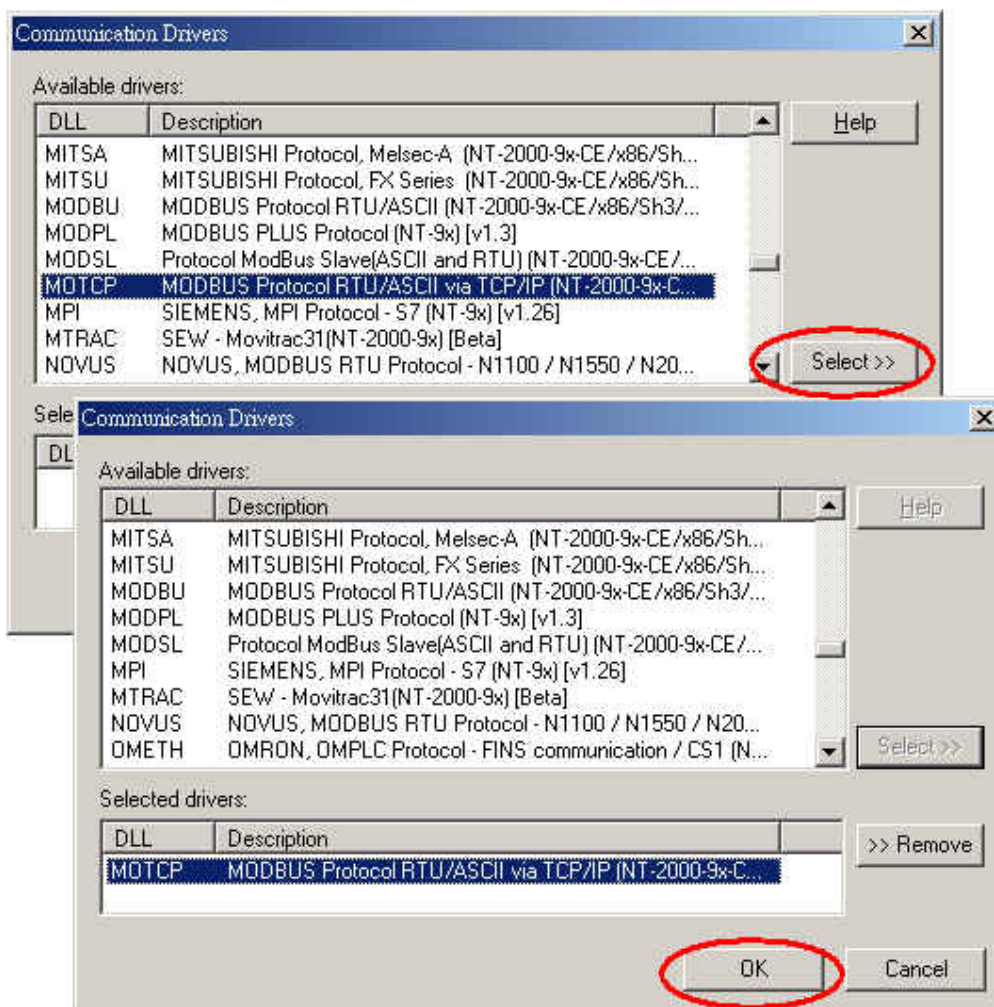
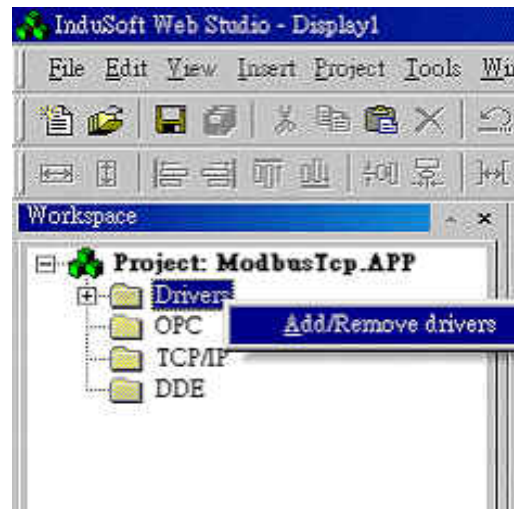


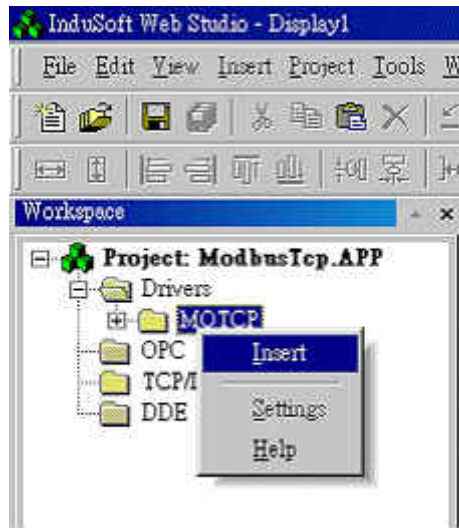
## 【 Indusoft and ISaGRAF communicate to each other in the WinCON 】

1. After the projects of Indusoft and ISaGRAF are finished separately, the communication between Indusoft and ISaGRAF in the WinCon is key point. The solution is building a driver form of Modbus/TCP in Indusoft.

2.The Steps are as follows :

### 【STEP 1】 Add a driver form of Modbus/TCP in Indusoft project.





Description:   Increase priority

Read Trigger:  Enable Read when Idle:  Read Completed:  Read Status:

Write Trigger:  Enable Write on Tag Change:  Write Completed:  Write Status:

Station:  Header:   Min:  Max:

	Tag Name	Address	Div	Add
1				
2				
3				
4				
5				

**【STEP 2】 Set up the content of this Modbus/TCP driver form**

**Annotations:**

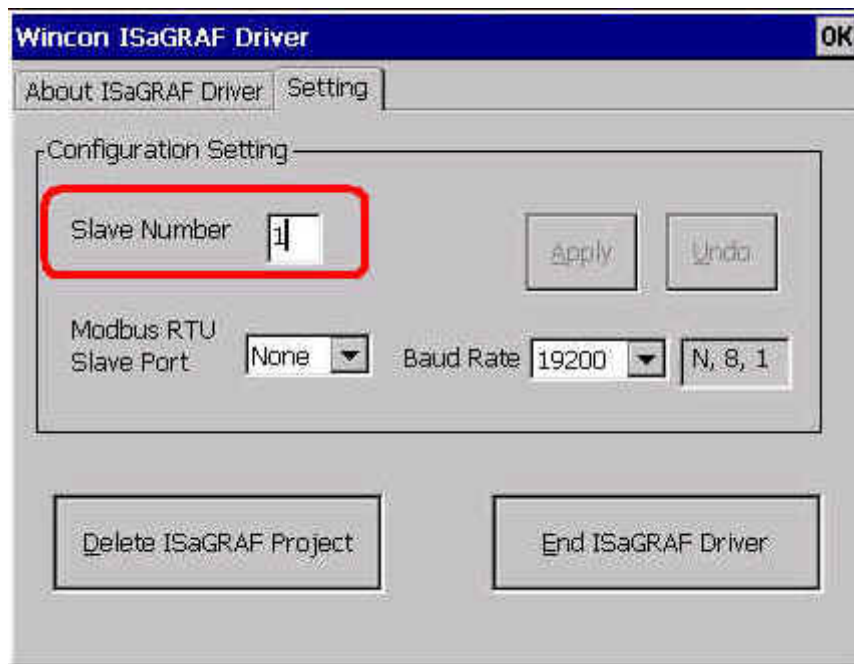
- Just Description:** Points to the Description field.
- Input 1 means read from ISaGRAF:** Points to the Read Trigger field.
- Input 1 means write to ISaGRAF:** Points to the Write Trigger field.
- Four Conditions:**
  - 0x:0 for DO
  - 1x:0 for DI
  - 3x:0 for AI
  - 4x:0 for AO
- InduSoft Tag Name:** Points to the Header field.
- Refer to ISaGRAF Address:** Points to the Address field in the table.
- keep the same:** Points to the Station field, which contains '127.0.0.1:502:1'.

**Form Fields:**

- Description:
- Read Trigger:
- Write Trigger:
- Station:
- Header:
- Table:
 

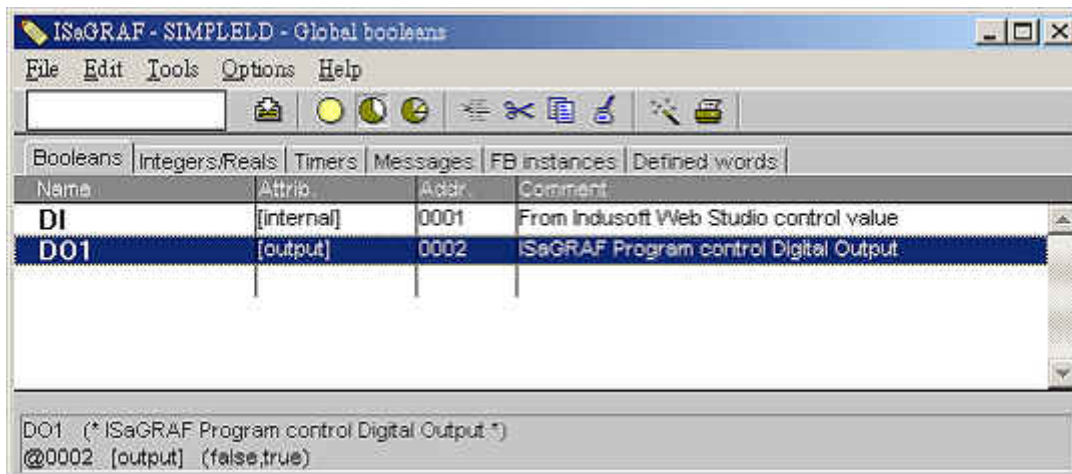
	Tag Name	Address	Div	Add
1	<input type="text"/>	<input type="text"/>		
2	<input type="text"/>	<input type="text"/>		

There is one thing to notice. “ 127.0.0.1:502:1 ” in the station field, the last number **1** means the “ slave number “ of the ISaGRAF configuration in the WinCon. If the slave number is **2**, then users should type “ 127.0.0.1:502:2 “ in the station field.



## For Example :

1. This is ISaGRAF DI/DO Tag setting :



2. This is the driver setting in InduSoft to communicate with ISaGRAF DI/DO Tag :

Description:  
 Corresponding\_To\_ISaGRAF\_DI  Increase priority

Read Trigger: Enable Read when Idle: Read Completed: Read Status:

Write Trigger: Enable Write on Tag Change: Write Completed: Write Status:  
 1

Station: Header:  Min:   
 127.0.0.1:502:1 0X:0  Max:

	Tag Name	Address	Div	Add
1	DI	1		
2				
3				

Communicate with DI Tag of ISaGRAF

Description:  
 Corresponding\_To\_ISaGRAF\_DO1  Increase priority

Read Trigger: Enable Read when Idle: Read Completed: Read Status:  
 1

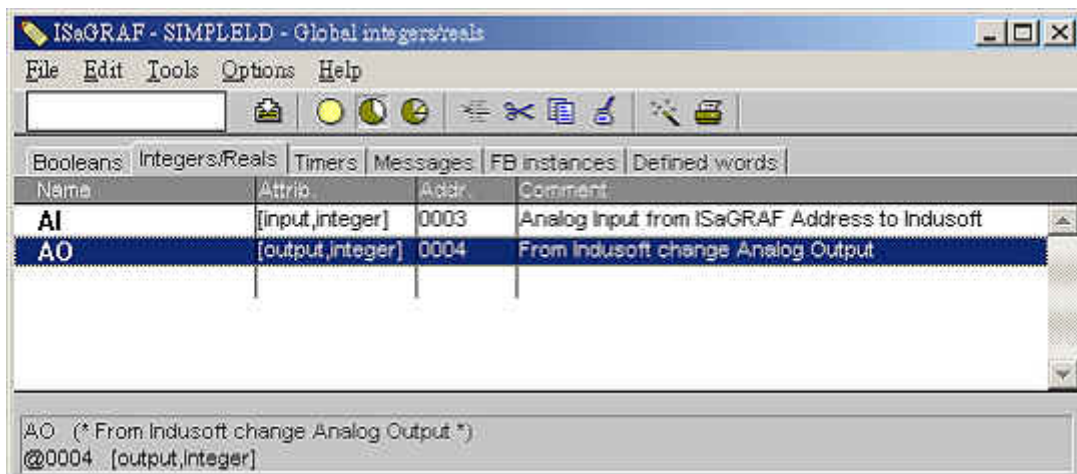
Write Trigger: Enable Write on Tag Change: Write Completed: Write Status:

Station: Header:  Min:   
 127.0.0.1:502:1 1X:0  Max:

	Tag Name	Address	Div	Add
1	DO1	2		
2				

Communicate with DO1 Tag of ISaGRAF

3.This is ISaGRAF AI/AO Tag setting :



4. This is the driver setting in InduSoft to communicate with ISaGRAF AI/AO Tag :

Description:  
 Corresponding\_To\_ISaGRAF\_AI  Increase priority

Read Trigger: Enable Read when Idle: Read Completed: Read Status:  
 1

Write Trigger: Enable Write on Tag Change: Write Completed: Write Status:

Station: Header:  Min:   
 127.0.0.1-502:1 3X:0  Max:

	Tag Name	Address	Div	Add
1	AI	3		
2				

Communicate with AI Tag of ISaGRAF

Description:  
 Corresponding\_To\_ISaGRAF\_AO  Increase priority

Read Trigger: Enable Read when Idle: Read Completed: Read Status:

Write Trigger: Enable Write on Tag Change: Write Completed: Write Status:  
 1

Station: Header:  Min:   
 127.0.0.1-502:1 4X:0  Max:

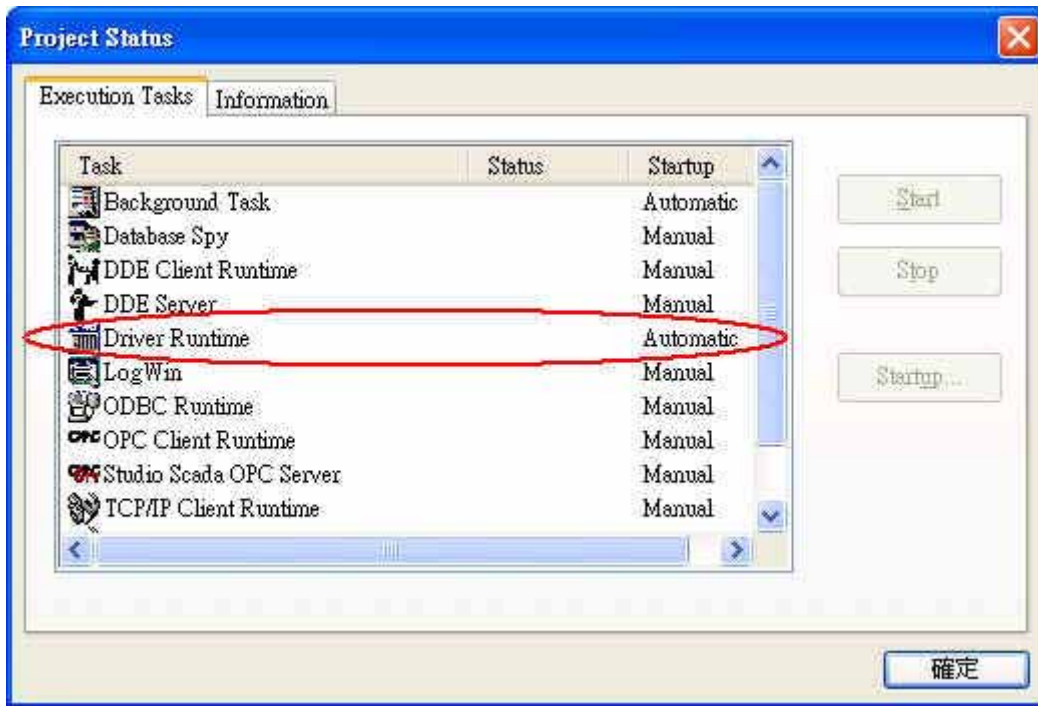
	Tag Name	Address	Div	Add
1	AI	4		
2				

Communicate with AO Tag of ISaGRAF

**【STEP 3】 Setup the Runtime mode of this Modbus/TCP driver**

After finishing the setting of driver, you need to setup Modbus/TCP driver in Runtime mode, which allows InduSoft Web Studio to start up the driver automatically. Please go to **“Execution Tasks”** tab of **project status** window. By click Project/Status menu option. The result window is as following figure. Please go to double click the **“Driver Runtime”** and choose the **automatic** mode.

There is one thing to notice that it is **decimal** in the Modbus/TCP and it is **hexadecimal** in the ISaGRAF. So if the address 0x0A in the ISaGRAF, then you need to fill the value 10 in the address field of Modbus/TCP driver form.



#### 【STEP 4】 Execute the programs of ISaGRAF and InduSoft

Execute the programs of ISaGRAF and InduSoft. Then all the steps of setting will be finished and you have already accomplished the communication between ISaGRAF and InduSoft.

#### <Note>

1. The Station definition of driver form in InduSoft :

Parameter	Default Value	Valid value	Description
Station	-	-	This field complies with the following syntax: <IP address>:<Port Number>:<Station No.> <ul style="list-style-type: none"> <li>- IP Address: I-8000 controller IP Address in the TCP/IP network</li> <li>- Port Number: Every Ethernet TCP/IP device has a Port number to communicate with other ones. ICPDAS port number is <b>502</b>.</li> <li>- Station No.: It is NetID of I-8000 controllers from 0~255</li> </ul>

2. The Header definition of driver form in InduSoft :

Information regarding the parameter "Header"			
Type	Sample of syntax	Valid of initial Address	Comment
0x	0x:0	Depend on the equipment	Coil status: Read and write events using the Modbus instructions 01, 05 and 15
1x	1x:0	Depend on the equipment	Input status: Read events using the Modbus instruction 02
3x	3x:0	Depend on the equipment	Input register: Read events using the Modbus instruction 04
4x	4x:0	Depend on the equipment	Holding Register: Read and write events using the Modbus instructions 03, 06 and 16